

REMARKS/ARGUMENT

1) Non-elected claim are canceled herein without prejudice.

2) Claims 1-3, 11-12, 14-16, 20 and 22-23 stand rejected under 35 U.S.C. 102(e) as being unpatentable over Pathak (Pathak et al., US Patent No.: 7,016, 317). Applicants respectfully traverse this rejection as set forth below.

In order that the rejection of Claim 1 be sustainable, it is fundamental that "each and every element as set forth in the claim be found, either expressly or inherently described, in a single prior art reference." Verdegall Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also, Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989), where the court states, "The identical invention must be shown in as complete detail as is contained in the ... claim".

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Independent Claim 1, as amended, requires and positively recites a wireless mobile communication apparatus comprising: "a wireless communication interface", "a session manager coupled to said wireless communication interface and cooperable therewith for participating in wireless communication of a request to establish a wireless communication session with another wireless communication apparatus", and "said session manager including a resource controller that **participates in a mutual decision with another wireless communication apparatus in deciding whether said wireless communication session will be established**, said resource controller cooperable with said wireless communication interface, after said request, for participating in wireless communication of information for use in deciding whether said wireless communication session will be established."

In contrast, the Pathak reference discloses a wireless local loop system which manages radio data transmission capacity and network resources with a network utilization manager (NUM) resident in the base station to allocate network resources. The Subscriber Utilization Client in each subscriber station communicates with a NUM **to request network resources from the base station.** The NUM **determines the requirements**, in data transmission capacity and/or QoS levels, for the desired connection and **considers the utilization of the network resources at the base station** in determining whether to establish the desired connection. (Abstract) In the Detailed Description of the Invention Pathak states:

System 20 includes a radio **base station** ... Base station 24 communicates with a plurality of subscriber stations 32 which are **installed** at subscriber premises. (col. 4, lines 4-17).

Communications channels 52 are established between base station 24 and each subscriber station 32. (col. 4, lines 46-47).

The radio resources for channels 52 is shared between base station 24 and all subscriber stations 32 ... (col. 4, lines 57-58).

The available data transmission capacity can be allocated as desired, in either direction (uplink or downlink), to various channels 52. (col. 5, lines 36-37).

When a connection is to be made between base station 24 and subscriber station 32, NUM 224 determines if sufficient radio and/or network resources can be assigned in the appropriate sector and establishes the connection if the resources are available. (col. 10, lines 28-34)

When a subscriber station 32 wishes to initiate a connection, it contacts base station 24 to forward a request to NUM 224. In either case, NUM 224 is informed of or determines the type of connection desired ... (col. 10, lines 37-42).

... NUM 224 can determine specific parameters for that type of connection from a lookup table ... (col. 10, lines 65-67).

... SUC 136 communicates the type and/or requirements of a desired connection to NUM 224 which can then determine if resources can be allocated to make the desired connection. (col. 12, lines 4-7)

... SUC 136 is informed by NUM 224 ... (col. 12, line 8)

Indeed, Pathak goes on to state “In other cases SUC can **inform** NUM of required parameters for a connection **and/or negotiate** with NUM to establish the connection. These cases are described below...” (col. 10, lines 3-4). There is no further mention of a negotiation between any SUC and any NUM. There are references to datarate parameters requested by the SUC, but the subscriber station (equivalent of our ‘mobile’) and base station do not make decisions in a mutual manner. Pathak states “the NUM ... considers the needs and defined or desired service level for the subscriber station.” (col 10, lines 22-24) and the “NUM 224 which can then determine if resources can be allocated to make the desired connection” (col. 12, lines 6-7).

The subscriber stations are not mobile, but are permanently fixed in a wireless local loop system (abstract). That is an important consideration when it comes to radio resource management. Because the subscriber stations in Pathak are fixed site stations, there is no on-going variation in radio propagation environment, particularly as the three-dimensional space is fixed for all time. Pathak does not have to deal with continuing variations in the

physical distribution of the wireless devices because they do not move. Hence, calculation of the appropriate radio resources is quite simplified, can be performed once, and can be handled in a central location, or by several network utilization managers operating on information provided by the base stations. Pathak's NUM controllers act upon requests made by the subscriber stations and a knowledge of the radio resource allocations made by the base stations. There is no mutual decision between the wireless (non-) mobile stations. As such, Pathak fails to teach or suggest, that his network utilization management center(s) "participate in a **mutual agreement with another wireless communication apparatus**", as required by Claim 1, OR "participating **with another wireless communication apparatus in mutually deciding**", as required by Claim 46.

Claims 2-3, 11-12, 14-16, 20 and 22-23 depend directly or indirectly from Claim 1. Claims 2-3, 11-12, 14-16, 20 and 22-23 are allowable for the same reasons given in support of the allowance of Claim 1. They stand allowable as depending from allowable claims and include further limitations not taught or suggested by the reference of record.

3) Claims 1-6, 11-23, 46-47 and 49 stand rejected under 35 U.S.C. 102(e) as being unpatentable over Rune (Rune et al., US Patent No.: 6,901,057). Applicants respectfully traverse this rejection as set forth below.

In order that the rejection of Claims 1 and 46 be sustainable, it is fundamental that "each and every element as set forth in the claim be found, either expressly or inherently described, in a single prior art reference." Verdegall Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also, Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989), where the court states, "The identical invention must be shown in as complete detail as is contained in the ... claim".

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494,

496 (CCPA 1970).

Independent Claim 1, as amended, requires and positively recites a wireless mobile communication apparatus comprising: “a wireless communication interface”, “a session manager coupled to said wireless communication interface and cooperable therewith for participating in wireless communication of a request to establish a wireless communication session with another wireless communication apparatus”, and “said session manager including a resource controller that **participates in a mutual decision with another wireless communication apparatus in deciding whether said wireless communication session will be established**, said resource controller cooperable with said wireless communication interface, after said request, for participating in wireless communication of communication information for use in deciding whether said wireless communication session will be established.”

Independent Claim 46, as amended, requires and positively recites, a wireless mobile communication apparatus, comprising: “a wireless communication interface”, “a session manager coupled to said wireless communication interface and cooperable therewith for participating in wireless communication of a request to establish, on a first wireless communication channel, a communication session”, and “said session manager including a resource controller that participates in **a mutual agreement with another wireless communication apparatus**, whether said request will be communicated, said resource controller cooperable with said wireless communication interface for participating in wireless communication, via a second wireless communication channel, of communication information for use in deciding whether said request will be communicated.”

In contrast, the Rune reference discloses a Bluetooth wireless system in which the new devices entering the network do not have to “use the master-slave switch according to the Bluetooth specification.” (Abstract) Rune has developed a work-around to the

Bluetooth specification for connecting new units to already existing piconets according to the Bluetooth specification. (col. 6, line 67 to col. 7, line 2). The new devices are then **designated as 'slaves'**. Rune writes that "The second basic part of the method provides a procedure by which **the initially inquiring and paging unit can become a slave unit** in a now formed or previously existing piconet without going through the master-slave switch procedure." (col. 7, lines 57-61). Although additional information is shared between the original master or slave units and the new unit, Rune's connection unit always becomes a slaves and retain their function. Any additional former master units may then attach to the new slave and they will remain masters (col. 16, lines 52-54).

It is important to realize that Rune only discloses a non-selected method of merging two or more piconets. His method avoids the master-slave switch procedure by changing the status of the joining device to a slave. **Rune does not remove the designation master or slave from any of the devices in the piconet.** In the Bluetooth system **a slave unit receives its direction and frequency hopping sequence from a master unit.** A master unit manages the radio resources (selects the frequency hop sequence) of its piconet. There is no negotiation or mutual decision making involved in a Bluetooth system regarding any parameters. As such, Rune fails to teach or suggest, that his piconet devices "participate in a **mutual agreement with another wireless communication apparatus**", as required by Claim 1, OR "participating **with another wireless communication apparatus in mutually deciding**", as required by Claim 46.

Claims 2-6, 11-23, 47 and 49 depend directly or indirectly from Claims 1 and 46. Claims 2-6, 11-23, 47 and 49 are allowable for the same reasons given in support of the allowance of Claims 1 and 46. They stand allowable as depending from allowable claims and including further limitations not taught or suggested by the reference of record.

4) Claims 1-6, 11-13, 15-21, 23, 46 and 50-51 stand rejected under 35 U.S.C. 102(b) as being unpatentable over Naddell (Naddell et al., US Patent No.: 6,253,091). Applicants respectfully traverse this rejection as set forth below.

In order that the rejection of Claims 1 and 46 be sustainable, it is fundamental that "each and every element as set forth in the claim be found, either expressly or inherently described, in a single prior art reference." Verdegall Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). See also, Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989), where the court states, "The identical invention must be shown in as complete detail as is contained in the ... claim".

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Independent Claim 1, as amended, requires and positively recites a wireless mobile communication apparatus comprising: "a wireless communication interface", "a session manager coupled to said wireless communication interface and cooperable therewith for participating in wireless communication of a request to establish a wireless communication session with another wireless communication apparatus", and "said session manager including a resource controller that **participates in a mutual decision with another wireless communication apparatus in deciding whether said wireless communication session will be established**, said resource controller cooperable with said wireless communication interface, after said request, for participating in wireless communication of **communication** information for use in deciding whether said wireless communication session will be established."

Independent Claim 46, as amended, requires and positively recites, a wireless mobile communication apparatus, comprising: “a wireless communication interface”, “a session manager coupled to said wireless communication interface and cooperable therewith for participating in wireless communication of a request to establish, on a first wireless communication channel, a communication session”, and “said session manager including a resource controller that participates in **a mutual agreement with another wireless communication apparatus**, whether said request will be communicated, said resource controller cooperable with said wireless communication interface for participating in wireless communication, via a second wireless communication channel, of **communication** information for use in deciding whether said request will be communicated.”

In contrast, the Naddell reference discloses a communication system which includes a plurality of communication devices and supporting wireless infrastructure. Upon receiving the inbound signaling word, the communication infrastructure determines whether the communication device is authorized and whether it is part of a group via subject matter identifier. If authorized, the communication infrastructure then determines whether there are sufficient communication resources available to service the particular request. If communication resources are available for the particular request, the communication infrastructure allocates them to the requesting communication device. (col 1, lines 12-44, Background of the Invention).

Indeed, Naddell goes on to state, “the inbound signaling word includes the identity of the requesting communication device, the particular device being requested, and a subject matter identifier that identifies the particular subject” (col 2, line 67 to col 3, line 3). Then a controller 12 utilizes an outbound signaling word to identify (broadcast to) the targeted communication group (based upon subject matter identifier) and arranges for the target group to communicate with one another through the infrastructure. At no time do the communication devices directly communicate with one another (col 3, line 3-

32). Further identification of the targeted group may be based upon the communication device's participation parameters (col 3 line 32-47). All communication in the group is through the infrastructure (base stations, controller, database and network). Naddell continues with the communication device providing "feedback to the communication infrastructure" indicating how the group communication should be processed (Abstract). Naddell states "The requesting device then has the option of establishing the group communication with the identified communication device ..." (col 4, lines 9-13).

Naddell's infrastructure is at the center of his system, storing the subject matter identifier and participation parameters in a database **19** (Figure 1), controlling the formation of group communications via controller **12** and base station **14** (Figure 1). His controller acts upon requests made by the communication devices (subscriber stations) to joining with like-interest users, based upon subject matter identifiers and participation parameters. There is no direct mutual decision between the wireless communication devices to establish a communications link, as in our invention. The feedback Naddell provides to the communication infrastructure is used to identify the appropriate group members with which to communicate with through the communications infrastructure. His decisions are based upon logical constructs, whereas our invention relates to mutual agreement of communication parameters (communication information) required to establish a communications link. As such, Naddell fails to teach or suggest, that his group dynamic controller(s) "participate in a **mutual agreement with another wireless communication apparatus**", as required by Claim 1, OR that his group dynamic controller system is "**cooperable** with said wireless communication interface ... for participating in ... communication of **communication information for use in deciding** whether said ... session will be established," as required by Claim 1 OR "**participating with another wireless communication apparatus in mutually deciding**", as required by Claim 46.

Further, Naddell fails to disclose the **second wireless communication channel** required by Claim 46. The examiner assumes that a second communication channel is inherently present, e.g., “a downlink channel”. The examiner is reading into the reference facts which are not present. The references that he cites make no mention or inference to a second communication channel. The Naddell Abstract makes no mention of a second communication channel being utilized by a communication device. Naddell’s Fig. 2, references **48** and/or **50** make no mention of a second communication channel being utilized by a communication device. In col. 2, lines 15-40 he speaks of “a plurality of communications devices” but make no mention of a second communication channel being utilized by any communication device. In col. 3, line 48 through col. 4, line 24 he makes mention of participation parameters and operation of the infrastructure-based controller, but makes no reference to a second communication channel being utilized by a communication device. As such, Naddell fails to teach or suggest, that his group dynamic controller(s) are “cooperable with said wireless communication interface for participating in wireless communication, **via a second wireless communication channel**, of **communication** information for use in deciding whether said request will be communicated” as required by Claim 46.

Claims 2-6, 11-13, 15-21, 23, 47-49, and 50-51 stand allowable as depending directly or indirectly from claims 1 and 46. They stand allowable as depending from allowable claims and include further limitations not taught or suggested by the reference of record.

5) Claim 48 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Rune (Rune et al., US Patent No.: 6,901,057 B2) in view of Naddell (Naddell et al., US Patent No.: 6,235,091 B1). Applicants respectfully traverse this rejection as follows:

In proceedings before the Patent and Trademark Office, “the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art”. In re

Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (citing In re Piasecki, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). “The Examiner can satisfy this burden **only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references**”, In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)(citing In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988)(citing In re Lalu, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)).

Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious "modification" of the prior art. **The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.** In re Gordon, 733 F.2d at 902, 221 USPQ at 1127. Moreover, **it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious.** In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). See also Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed.Cir.1985).

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Dependent Claim 48 , as amended, requires and positively recites the apparatus of Claim 47 wherein “said information identifies a location of the another wireless mobile communication apparatus **said location information to be used for directing communications.**”

Although dependent Claim 48 is allowable for the reasons set forth above regarding independent Claim 46 and its intermediary Claim 47, additional reasons are set forth below.

With regard to the apparatus of dependent Claim 47, in contrast , Rune discusses modification of the Bluetooth system communication information. Specifically (col. 11, line 67 to col. 12, line 19), he supplies information that may be encoded into an FHS packet or a modified PAGE RESPONSE, including:

- (1) whether the sending unit is connected to a piconet or not,
- (2) whether the sending unit is a master or a slave or slaves or both,
- (3) whether the sending unit prefers to be a master or a slave unit after a subsequent PAGE procedure,
- (4) the number of slaves in a piconet,
- (5) the BD_ADDR(s) of the master(s) of the existing piconets(s) in which the sending unit is a slave member,
- (6) the clock values as estimated by the sending unit, of the master unit of the existing piconets in which the sending unit is a slave member,
- (7) inter-piconet scheduling parameters,
- (8) battery status,
- (9) traffic parameters, and/or
- (10) priority parameters.

None of the listed PAGE RESPONSE parameters (1-10) define information required to establish a transmission and reception parameters of a wireless communication session. Conspicuous by its absence are the type of parameters presented in our specification (“communications parameters”, specification page 9, lines 8-10), such as, frequency channel defined as the frequency and bandwidth of communication available at each wireless communication device. These Bluetooth PAGE RESPONSE parameters do not define the transmitted modulation, data rate and transmit power parameters discussed in our specification. Indeed, Rune’s parameters are not used to establish a communications link, but define the status of the paged device with respect to its local piconet.

With regard to dependent Claim 48, the examiner suggests that Naddell (col. 5, line 45-55) supplies the missing disclosure “wherein said information identifies a location of the another wireless mobile communication apparatus.” Naddell’s use of location is for the purpose of restricting communication to “only members located within a geographic area ...” **irrespective of direction.** Again, the examiner is directed to our specification (page 9, lines 8-10) in which relative direction assists the two or more wireless devices to communicate using directional transmit and/or receive antennas in a densely utilized RF environment such as found in an urban area.

As such, Naddell, in combination with Rune, fails to teach or suggest that his limitation identifier, including location restriction, is “information (which) identifies a location of the another wireless mobile communication apparatus **said location information to be used for directing communications**” as required by Claim 48.

When all of the words of Claims 46, 47 and 48 are considered as a whole, even were it proper to combine the Rune and Naddell references, which it is not, all of the claimed elements are not disclosed in the combined teaching.

Claim 48 stands allowable as depending indirectly from Claim 46. They stand allowable as depending from allowed claims and include further limitations not taught or suggested by the references of record.

6) Claims 7-10 and 24-27 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Rune (Rune et al., US Patent No.: 6,901,057 B2) in view of well known art (no reference given). Applicants respectfully traverse this rejection as follows:

In proceedings before the Patent and Trademark Office, “the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art”. In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (citing In re Piasecki, 745 F.2d 1468,

1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). "The Examiner can satisfy this burden **only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references**", In re Fritch, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992)(citing In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988)(citing In re Lalu, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)).

Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious "modification" of the prior art. **The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.** In re Gordon, 733 F.2d at 902, 221 USPQ at 1127. Moreover, **it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious.** In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). See also Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed.Cir.1985).

Furthermore, "all words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Applicant has previously explained why the Rune reference does not disclose the invention of Claims 1-6 and 11-13 upon which Claim 7 (via Claims 2 and 3) and Claim 24 (via Claims 15 and 23) ultimately depend.

Claims 7-10 and 24-27 are dependent upon the common construct found in Claims 7 and 24 which requires and positively recites: "wherein said information

indicates that a further wireless communication apparatus has objected to establishment of said communication session.”

The examiner correctly points out that Rune fails to disclose “wherein said information indicates that a further wireless communication apparatus has objected to establishment of said communication session.”

We specifically challenge the examiner to cite the reference to “well known prior art” which indicates “that a further wireless communication apparatus has objected to establishment of said wireless communication session for the advantages of avoiding interference or collision between communications and or devices.” None of the references aptly cited by the examiner speak to this ‘notoriously well known’ concept and we kindly request the examiner provide the cite to this well know art.

When all of the words of Claims 7-10 and 24-27 are considered as a whole, even were it proper to combine the Rune reference with un-cited ‘notoriously well known art’, which it is not, all of the claimed elements are not disclosed in the combined teaching.

Claims 7-10 and 24-27 stand allowable as depending directly or indirectly from Claim 1. They stand allowable as depending from the allowable claim and include further limitations not taught or suggested by the reference of record.

Accordingly, Claims 1-27 and 46-51 stand allowable. Applicants respectfully request allowance of the application as the earliest possible date.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ron O. Neerings", is written above the typed name.

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